## DECISION RECORD

<u>Decision</u>: It is my decision to authorize the issuance of a ten year term grazing permit of public lands on the Bob Whitaker, Garcia Flats Ranch, Allotment #64051, for 93 cattle year long at 97 percent public land. Any additional mitigation measures identified in the environmental impacts sections of the attached environmental assessment have been formulated into stipulations, terms and conditions. Any comments made to this proposed treatment were considered and any necessary changes have been incorporated into the environmental assessment.

In accordance with 43 CFR 4160.2, any applicant, permittee, lessee, or other affected interests may protest this proposed decision in person or in writing to the authorized officer within 15 days after receipt of this decision. Please be specific in your points of protest. In the absence of a protest, this decision will become final without further notice.

Written appeal may be filed to the Final Decision for the purpose of a hearing before an administrative law judge under 43 CFR 4.470. A period of 30 days after receipt of the Final Decision is provided in which to file an appeal in this office. (43 CFR 4160.3 (c))

Signed by T. R. Kreager Assistant Field Manager 10/14/99 Date

# ENVIRONMENTAL ASSESSMENT for GRAZING AUTHORIZATION

# **ALLOTMENT 64051**

Township 8 South, Ranges 24 and 25 East Various Sections

EA-NM-060-99-202

**AUGUST 1999** 

U.S. Department of the Interior Bureau of Land Management Roswell Field Office Roswell, New Mexico

ENVIRONMENTAL ASSESSMENT for

#### GRAZING AUTHORIZATION

Allotment 64051 Township 8 South, Ranges 24 and 25 East Various Sections

> EA-NM-060-99-202 August, 1999

## I. Introduction

# A. Purpose and Need for the Proposed Action

The grazing regulations (43 Code of Federal Regulations [CFR] 4110) allow for a ten-year permit to be issued for grazing inside the grazing district boundary and ten year leases on allotments outside the grazing district boundary. The Roswell Resource Management Plan/Environmental Impact Statement (RMP/EIS) (October 1997) states a livestock grazing management goal of providing effective and efficient management of allotments to maintain, improve and monitor range conditions. A site specific analysis of the impacts of issuing a grazing permit to the applicant, Bob Whitaker, is needed for compliance with the National Environmental Policy Act (NEPA) and to make an informed decision.

This document will analyze the site specifics of authorizing the issuance of the permit on Allotment 64051 (Garcia Flats), other future actions such as range improvement projects will be addressed in a project specific environmental assessment. There are current plans for continued management actions on this allotment in the form of prescribed burns. Environmental assessments have already been completed for these actions. This allotment is within the Drainages, Draws and Canyons community, and the Grassland community as identified in the Roswell RMP/EIS. Vegetative communities managed by the Roswell Field Office are identified and explained in the RMP/EIS. Appendix 11 of the Draft RMP/EIS describes the Desired Plant Community (DPC) concept and identifies the components of each community.

## B. Conformance with Land Use Planning

The Roswell RMP/EIS has been reviewed to determine if the proposed action conforms with the land use plan's Record of Decision. The Roswell RMP/EIS states a livestock grazing management goal of providing effective and efficient management of allotments to maintain, improve and monitor range conditions. The proposed action is consistent with the RMP/EIS.

# C. Relationships to Statues, Regulations, or Other Plans

The proposed action is consistent with the Federal Land Policy and Management Act of 1976 (FLPMA) (43 U.S.C. 1700 et seq.); the Taylor Grazing Act of 1934 (TGA) (43 U.S.C. 315 et seq.), as amended; the Clean Water Act (CWA) (33 U.S.C. 1251 et seq.), as amended; the Endangered Species Act (ESA) (16 U.S.C. 1535 et seq.) as amended; and the Public Rangeland Improvement Act of 1978 (PRIA) (43 U.S.C. 1901 et seq.)

# II. Proposed Action and Alternatives

## A. Proposed Action

The proposed action is to authorize a ten year grazing permit on Allotment 64051 (Garcia Flats) for 93 Animal Units (AUs) year long for 1083 Animal Unit Months (AUMs). The permit would be offered to Bob Whitaker.

#### B. No Authorization Alternative

This alternative, if selected, would be to not issue a grazing permit for Allotment 64051. No grazing would be authorized on the federal land within the allotment.

## III. Affected Environment

#### A. General Setting

Allotment 64051 is located in Chaves County, about eleven miles north of Roswell, New Mexico. The allotment is made up of four pastures, and one trap. The allotment is watered by two base water wells, a water pipeline system, and three dirt tanks. The allotment consists of 4,856 acres of public land, approximately 150 acres of private land and 185 acres of uncontrolled lands. (See attached map).

Allotment 64051 (Garcia Flats Ranch) lies inside the Roswell Grazing District Boundary, established subsequent to the Taylor Grazing Act, and it is administered under Section 3 of the TGA. The permitted use on a Section 3 allotment is established by the amount of forage produced on the public lands and all other controlled lands, such as private, leased and state grazing leased lands. The public animal unit months are then derived from the amount of forage from the public lands in relationship to all forage produced. During the late 1930's and 40's BLM and the allottee at that time agreed to the number of stock the ranch could run. Since then, BLM Roswell has been very involved in vegetation monitoring and range evaluations. Using these data, adjustments to stocking rates and total

numbers has been made on allotments throughout the resource area. BLM has established the number of stock allowed on the entire ranch, inclusive of all land status, excluding only lands that are not controlled by the allottee (not owned or leased).

The area of Allotment 64051 consists of rolling grass covered hills, with wide salty flats and loamy bottomlands. The average elevation ranges from 3,550 to 3,650 feet above sea level. Grass species make up 91 percent of the production in the existing plant community. The average recorded precipitation for the area is 12.30 inches (recorded in Roswell, NM). Most of the annual precipitation falls during high intensity, short duration thunderstorms occurring from May to October.

The following resources or values have been evaluated and are either not present or are not affected by the proposed action or alternatives in the EA: Prime/Unique Farmlands, Cultural Resources, Native American Religious Concerns, Riparian/Wetlands, Wild and Scenic Rivers, Hazardous Wastes, and Areas of Critical Environmental Concern. The impact of the proposed action and alternative to minority or low-income populations or communities has been considered and no significant impact is anticipated.

#### B. Affected Resources

## 1. Soils

The soils present on Allotment #64051 in Chaves County are the Alama-Poquita association, dry, nearly level, the Alama, dry Pajarito complex, hummocky, the Glendale-Harkey association, the Hollomex-Gypsum land-Alama dry complex and the Hollomex loam.

Soils on the uplands are from 12 to 60 inches deep, well drained, and moderately to slowly permeable. They are formed in calcareous alluvium and residuum, exclusive of those areas of stratified beds of gypsum. In these areas hard gypsum is at a depth of about 12 inches. The upland slopes range from 0 to 25 percent. These soils are generally found on the Ballard Hill, which lies on the eastern side of the allotment.

Soils in the salt flats and bottomlands are as much as 60 inches deep and are well drained. The permeability ranges from moderate to moderately slow. Most of the soils in these areas are found on alluvial side slopes, fans and in the flood plains. These soils are generally formed in calcareous alluvium, calcareous-gypsiferous alluvium and residuum. Runoff is medium for the Alama, Poquita, Glendale, Hollomex and Pajarito soils. Slopes vary from 0 to 8 percent.

For all soils the water erosion hazard is moderate and the wind erosion hazard is high.

More information on these soils can be found in the "Soil Survey of Chaves County, New Mexico, Northern Part".

# 2. Vegetation

The vegetation on the public land within Allotment #64051 fits predominately within the Salty Bottomland SD-3 range site with inclusions of the following range sites: Bottomland SD-3, Loamy SD-3, Gyp Uplands SD-3, Salt Flats SD-3 and Loamy Sand SD-3.

The Salty Bottomland SD-3 range site lists alkali sacaton as the most abundant grass, while vine mesquite, Halls panicum, dropseeds, tridens, sand and ear muhly, tobosa and three-awn are also found. Shrubs such as fourwing saltbush, other atriplex species, iodinebush, winterfat and mesquite are also found on this range site. Forbs which may occur in this area are desert holly, sedges, threadleaf groundsel, and globemallow.

The forb component in all of the range sites varies from year to year, dependent upon the amount and timing of precipitation.

#### 3. Wildlife

The area provides habitat for small animals, birds, rodents, and an occassional mule deer. The area does contain motts of brush or tree species that could provide quality cover for the larger animals.

#### 4. Threatened and Endangered Species

The only known threatened or endangered species of plant or animals on Allotment 64051 is the bald eagle. A list of federal threatened, endangered and candidate species reviewed for this EA can be found in Appendix 11 of the Roswell Approved RMP (AP11-2). Of the listed species, avian species such as the bald eagle may be observed in the general geographic area during migration or winter months. There are no designated critical habitat areas within this allotment. The swift fox is a Federal Candidate species that may occupy or utilize the area, refer to the Biological Opinion (AP11-38) in the Roswell RMP for a detailed description of the range, habitats and potential threats.

## 5. Livestock Management

The allot ment is grazed by cattle, using a cow-calf operation. The latest grazing permit on Allotment 64051 (Garcia Flats Ranch) was for 93 cows. The livestock are rotated in the pastures, using a best pasture rotation system.

#### 6. Visual Resources

Allotment 64051 is located in a Class II and a Class IV Visual Resource Management (VRM) Area. The Class II rating area surrounds the Bitter Lakes National Wildlife Refuge (NWR), which lies to the east of the allotment. Within the allotment the Class II rating area lies from the crest of Ballard Hill on the west side to the boundary of Bitter Lakes NWR, varying from 0.25 miles to 0.5 miles in width. The Class IV rating area extends over the remaining portion of the allotment. The Class II rating means that changes in any of the basic elements (form, line, color, texture) caused by a management activity should not be evident in the landscape. A contrast may be seen but should not attract attention. The Class IV rating means that contrasts may attract attention and be a dominant feature in the landscape in terms of scale. However, changes should repeat the basic elements of the landscape.

## 7. Water Quality

Dirt tanks are the only surface water, three of which are located on the public land. The amount of water and period of retention in the dirt tanks is dependent on the weather conditions. Ground water is pumped from two drilled wells. The quality of the well water is adequate for livestock and wildlife use. The Arroyo del Macho is the only significant surface drainage on the allotment. It is ephemeral, only flowing during storm runoff.

# 8. Floodplains

Within this allotment floodplains exist that are recorded on Federal Emergency Management Agency maps. The identified floodplains are generally the major drainages along the Arroyo de Macho and Salt Creek. Water pipelines, fences and roads cross the floodplains. No adverse impacts have resulted from these improvements. No future permanent, above ground structures will be authorized on federal lands within the floodplains, if there is a practicable alternative. Any floodplain development would be analyzed in a project-specific environmental assessment.

## 9. Air Quality

Air quality is good. The area is in a Class II area for the prevention of significant deterioration of air, as defined in the federal Clean Air Act. Class II areas allow a moderate amount of air quality degradation.

## 10. Recreation, Caves and Karst

Recreation: Dispersed recreational opportunities exist in Allotment 64051 as access to the public land is available along Cottonwood Road, Chaves County Road C1-26. Dispersed recreational activities include hunting, caving, fishing, sightseeing, bird watching, primitive camping, mountain biking, horseback riding and hiking. Off Highway Vehicle designation for public lands within this allotment are classified as "Limited" to existing roads and trails.

Caves and Karst: Allotment 64051 is located within a designated area of High Karst and Cave Potential.

Although a complete significant cave or karst inventory has not been completed for the public lands located in this grazing allotment, no known significant cave or karst features are known to exist within this allotment. If a significant cave or karst feature is discovered on the allotment, then monitoring of the Cave/Karst feature will be necessary to determine if protective measures are required in the future.

# IV. Environmental Impacts

## A. Impacts of the Proposed Action

#### 1. Soils

The soils will be influenced by livestock grazing directly by compaction, trailing that may break through the turf, chipping of soil surface caused by hoo faction, and recycling of nutrients. Infiltration rates are increased by chipping of soil surface over most of the area but will be decreased by compaction around watering, trailing, and bedding areas. The area of compaction would be relatively small. Livestock remove vegetation that would have reduced the erosive forces of wind, rain and surface runoff. Proper utilization levels and grazing distribution patterns under the present operation retain sufficient vegetative cover so as to maintain the stability of the soils. The level of grazing identified in the proposed action would continue to maintain an adequate ground cover for protection and the development of the soils. The percentage of bare ground and rock found on the public land within the allotment fall within the parameters established by the RMP/EIS for this vegetative community.

#### 2. Vegetation

There is one vegetative study on this allotment, established in 1982. Ecological condition as shown by the data collected from 1982 through 1997 indicate the vegetation is sustainable at the proposed amount of grazing by livestock. The most recent data show the ecological condition for the area evaluated to be in good condition, maintaining an average rating of 49.47, most recently having a rating of 52.12. Vegetation studies indicate that the diversity and amount of vegetation present meets the multiple resource requirements and will support the number of livestock proposed for this allotment. Copies of the monitoring data and the analysis of the data are available at the Roswell Field Office.

The following table summarized monitoring data for the Garcia Flat Allotment 64051.

64051 Monitoring Data Summary, Allotment Averages from 1982 to 1997							
	Grasses	Forbs	Shrubs	Trees	Litter	Bare Ground	Rocks
Percent composition of vegetative cover	94.79	0.33	4.66	0.22	N/A	N/A	N/A
Percent Ground Cover	19.62		1.44		27.31	51.62	0.00

## 3. Wildlife

Domestic livestock will continue to utilize vegetative resources needed by a variety of wildlife species for life history functions within this allotment. The magnitude of livestock grazing impacts on wildlife is dependent upon the species of wildlife being considered, and it's habitat needs. In general, livestock stocking rate adjustments have been made in the past to minimize the direct competition for those vegetative resources needed by a variety of wildlife species. Cover habitat for wildlife will remain the same as the existing situation. Maintenance and operation of existing waterings will continue to provide dependable water sources for wildlife, as well as livestock

# 4. Threatened and Endangered Species

Livestock grazing as a result of the grazing permit, May affect, but not likely adversely affect the bald eagle. It is expected that habitat and range condition would be maintained or improved by authorizing grazing conducive with vegetation production goals. Habitat for wintering bald eagles would not have significant impacts by livestock grazing since there are no perennial riparian habitats within the allotment and no destruction or modification of habitat as outlined in the US. Fish and Wildlife Service Guidance Criteria would occur.

Potential bald eagle habitat does occur on the Bitter Lakes NWR which is adjacent to this allotment. However, livestock grazing will not have any negative impacts to the Refuge.

Wintering Bald eagles will utilize the area as a stopover when migrating and searching for prey. Therefore, a "May Affect - Not Likely to Adversely Affect" determination will be made.

## 5. Livestock Management

The proposed action would allow the existing livestock management to continue. The existing management is not causing any adverse impacts to the environment. The distribution and supply of livestock water is available for wildlife. Livestock under rotation grazing will continue to maintain or increase ground cover by stimulating growth of vegetation and by scattering litter which protects the soil from wind and water erosion.

#### 6. Visual Resources

Visual resources will be managed to meet the Visual Resource Management class. All proposed management activities will be evaluated with regard to visual resource management and those project that are compatible with the character of the natural landscape will be encouraged. No management actions should be proposed that would degrade visual quality to the extent that a change in any VRM class will result. The continued grazing of livestock would not affect the form or color of the landscape, or the primary aspect of the vegetation within the allotment.

# 7. Water Quality

Livestock grazing will not have a significant influence on water quality. The ground water is not affected by livestock grazing.

## 8. Floodplains

No impacts to the floodplains would be expected. By keeping structures out of floodplains, impacts would not occur.

# 9. Air Quality

The proposed action will not have an effect on the air quality. The air quality will remain virtually the same as present.

## 10. Recreation, Caves and Karst

Grazing should have little or no impact on the dispersed recreational opportunities within Allotment 64051, since the recreational use of these public lands are relatively low. The evidence or presence of livestock can negatively affect visitors who desire solitude, unspoiled landscape views or hike without seeing signs of livestock. However, grazing can benefit some forms or recreation, such as hunting, by creating new water sources for game animals.

Continued grazing of the allot ment may affect significant caves or karst resources if protective measures are not followed. If monitoring determines that significant caves or karst features are being affected by grazing, additional protective measures will be required. The protective measures could include, but are not limited to, the following actions: Fencing sinks, cave entrances or arroyos from multiple-use impacts; removing check-dams, erosion control projects and stock ponds; closing roads; no chemical vegetation removal. The area around significant caves or karst features should be treated sensitively, so no adverse impacts affect the cave or karst feature.

## B. Impacts of the No Livestock Grazing Alternative

#### 1. Soils

The soil will not be subjected to compaction, chipping or standing vegetation reduction that is associated with livestock grazing. The stability and development of the soil would be about the same as with grazing. Soil compaction would be reduced on the allot ment around drinking troughs and along trails.

## 2. Vegetation

There would be small change in the types and amounts of vegetation found within the allot ment. It is expected that the number of plant species found within the allot ment will remain the same. Vegetation will continue to be utilized by wildlife but the removal of the standing vegetation by livestock would be absent.

#### 3. Wildlife

There would be no competition between livestock and wildlife for forage or cover.

# 4. Threatened and Endangered Species

There would be no change to the bald eagle habitat if the no grazing alternative was selected.

## 5. Livestock Management

Under the no grazing alternative there would be no grazing on the federal land in the area of Allotment 64051. This would have an adverse economic impact to the livestock operation.

#### 6. Visual Resources

No change in the visual resources, scale, land-form, and color will occur with the no grazing alternative.

#### 7. Water Quality

Impacts to water quality will not be significantly different under Alternative B than under the Proposed Action. Ground water will not be changed by the no grazing alternative.

## 8. Floodplains

Impacts to the floodplains would be the same as the proposed action.

#### 9. Air Quality

There would be no change to the air quality with the no grazing alternative.

## 10. Recreation, Caves and Karst.

This alternative would have no effect on recreation, caves or karst features.

# V. Cumulative Impacts

Cumulative impacts of the grazing and no grazing alternatives were considered in Chapter 4 of Rangeland Reform '94 Draft Environmental Impact Statement and in Chapter 4 of the Roswell Resource Area Proposed RMP/EIS. The no livestock grazing alternative was not selected in either document.

On the allotment specific level, there will be no cumulatively significant impacts from the proposed action or from the no grazing alternative.

# VI. Residual Impacts

The area has been grazed by livestock since the early part of the 1900's, if not longer. Recent vegetative monitoring studies have shown that grazing, at the current permitted numbers of animals, is sustainable. If the mitigation measures are enacted, then there would be no residual impacts to the proposed action.

# VII. Mitigating Measures

Vegetation monitoring studies will continue to be conducted and the permitted numbers of livestock will be adjusted if necessary. If new information surfaces that livestock grazing is negatively impacting other resources, action will be taken at that time to mitigate those impacts.

# VIII. Fundamentals of Rangeland Health

The fundamentals of rangeland health are identified in 43 CFR §§4180.1 and pertain to watershed function, ecological processes, water quality and habitat for threatened and endangered (T&E) species and other special status species. Based on the available data and professional judgement, the evaluation by this environmental assessment indicates that the conditions identified in the fundamentals of rangeland health exist on the allotment.

## FINDING OF NO SIGNIFICANT IMPACT/RATIONALE

<u>FINDING OF NO SIGNIFICANT IMPACT</u>: I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined the proposed action will not have significant impacts on the human environment and that preparation of an Environmental Impact Statement (EIS) is not required.

Rational for Recommendations: The proposed action would not result in any undue or unnecessary environmental degradation. The proposed action will be in compliance with the Roswell Resource Management Plan and Record of Decision (October, 1997)

T. R. Kreager, Assistant Field Office Manager - Resources